# **EXHIBIT 7**

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1	UNITED STATES DISTRICT COURT
2	NORTHERN DISTRICT OF CALIFORNIA
3	SAN JOSE DIVISION
4	
	CISCO SYSTEMS, INC. Case No.: 5:14-cv-05344-BLF(PSG)
5	
	Plaintiff,
6	
	V.
7	
	ARISTA NETWORKS, INC.
8	
	Defendants.
9	
10	
11	
12	
13	* HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY *
14	VIDEOTAPED DEPOSITION OF KIRK LOUGHEED
15	Palo Alto, California
16	Monday, April 4, 2016
17	Volume 2
18	
19	
20	
21	Reported by:
22	LESLIE JOHNSON
23	RPR, CSR No. 11451
24	Job No.: 2285024
25	PAGES 190 - 399
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1 who is we? 2 Myself and the engineers at Cisco. Α. 3 Q. Have you ever heard of engineers outside 4 of Cisco using the term "IP route" to distinguish 5 between an IP route and a DECnet route or a PUP 6 route? 7 I was -- I wasn't particularly associating 8 with engineers doing network protocol outside of 9 Cisco. And if it was -- if it was -- I wouldn't be 10 surprised if others did, but I -- I was using my own 11 internal terminology as to what I felt was my own 12 internal -- our internal terminology. 13 Did you personally come up with the term 0. "IP route"? 14 15 In the first software I actually used 16 "route" because there was no need to -- the original 17 software was IP only. There was no need to 18 distinguish. 19 It was not a multiprotocol? Q. 20 The original stuff was not multiprotocol. Α. 21 How long did it take for you to come up 0. 22 with the command "show ip route," the syntax? 2.3 Α. Once I made the decision that we needed to 24 generalize the command hierarchy so that we could

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distinguish between commands with similar functions

25

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```
1
     but for different protocols, then it was a very easy
 2
     generalization.
              So a matter of minutes?
 3
          0.
          A. Once the decision had been made to do
 4
 5
     that, yes.
 6
     Q. What do you think is creative about the
7
     command "show ip route"?
 8
     MR. NEUKOM: Objection. Calls for opinion
9
     and legal conclusion.
     THE WITNESS: So for the "route" command,
10
11
     I originally needed some way of saying -- what I
12
     needed was a way of indicating to the software that
13
     if I had a packet destined for a particular network,
     which is the first argument, that I send it to a
14
15
     particular IP address, which is the IP address of a
16
     router. And one of those list of network and router
17
     pairs may actually be the default, if I didn't find
18
     a network mentioned anywhere and couldn't figure out
     what to do with it. Otherwise, send it to this
19
20
     particular router or gateway. Those are the pieces
21
     of information that I needed, and I just -- I chose
     the name "route." And "IP route" came along
22
23
     afterwards.
24
     BY MR. WONG:
25
          Q. Are you the originator of the "show
                                              Page 331
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```
1
     spanning-tree" command?
 2
          Α.
               Yes, I am.
 3
          Q.
               What is a spanning tree?
 4
               My testimony earlier in the day addresses
          Α.
 5
     that question.
 6
          Q.
               So thank you.
 7
               And your explanation of what is a spanning
8
     tree earlier in today's deposition would be the same
 9
     for my question regarding the "show spanning-tree"
10
     command; is that correct?
11
          Α.
               Right.
               And what functionality does the "show
12
          0.
13
     spanning-tree" command perform?
14
                It displayed global parameters having to
          Α.
15
     do with the spanning tree and interface-specific
16
     parameters having to do with the spanning tree on
17
     the box.
18
               And the term "spanning tree," you didn't
          Q.
19
     come up with that, right, Mr. Lougheed?
20
               No, I didn't.
          Α.
21
               The term "spanning tree" is used in
          0.
22
     ANSI/IEEE standards, correct?
2.3
          Α.
               Yes. To my knowledge.
24
                (Exhibit 467 marked for identification.)
     / / / /
25
                                                  Page 332
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1 Q. And why did you choose to put a hyphen 2 between the words "spanning" and "tree"? 3 Α. Because I like English phrases and I like separating them with dashes. 4 5 0. Why did you --6 Α. And I saw -- go ahead. 7 Q. No, no. I interrupted you, Mr. Lougheed. 8 Go ahead. 9 Α. And I had no concept or no belief at the time that I would need to turn that into a 10 11 hierarchy. 12 And when you say -- refer to a need to 0. 13 turn it into a hierarchy, are you referring to the 14 option of using a space instead of a hyphen in 15 between the word "spanning" and "tree"? 16 Α. Yes. 17 How long did it take for you to come up Q. with the command "show spanning-tree," the syntax? 18 19 The syntax? Once I had the protocol Α. 20 working, wouldn't have been very long. 21 0. Matter of minutes? 22 Less than a day. Α. 2.3 Q. Do you think the command "show 24 spanning-tree" is creative? I don't understand. 25 Α. Page 336

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1	MR. NEUKOM: Objection. Calls for opinion
2	testimony.
3	THE WITNESS: I don't understand what you
4	mean by the word "creative."
5	BY MR. WONG:
6	Q. Do you believe that it took any degree of
7	creativity to come up with the command "show
8	spanning-tree"?
9	MR. NEUKOM: Same objection. Calls for
10	opinion testimony. Also calls for a legal
11	conclusion.
12	But notwithstanding my objections, you
13	should still try to answer these questions to the
14	best of your ability.
15	THE WITNESS: And the question is?
16	BY MR. WONG:
17	Q. Do you believe that it took any creativity
18	to come up with the command "show spanning-tree"?
19	A. I do believe that it shows a degree of
20	creativity.
21	Q. And describe go ahead.
22	A. I mean
23	Q. Were you done with your answer?
24	A. Yes.
25	Q. And what is creative about the command
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1	"show spanning-tree"?
2	MR. NEUKOM: Objection. Calls for a legal
3	conclusion and calls for opinion testimony.
4	THE WITNESS: And I just I'm not sure
5	what the hell you mean by "creative."
6	BY MR. WONG:
7	Q. Have you do you know what the word
8	"creative" means?
9	What do you understand the word "creative"
10	to mean? The question is, what do you understand
11	the word "creative" to mean?
12	MR. NEUKOM: Objection to form.
13	THE WITNESS: It's the ability to create
14	things. And I was creating a command expression to
15	monitor a piece of complex software.
16	What do you mean by "creative"?
17	BY MR. WONG:
18	Q. I'm going to use your definition of
19	creative here, Mr. Lougheed. Under your definition
20	of "creative," what's creative about the "show
21	spanning-tree" command?
22	MR. NEUKOM: Objection. Calls for opinion
23	testimony and calls for a legal conclusion.
24	THE WITNESS: Writing any piece of
25	software involves some degree of creativity. It may

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1 not be at the Shakespearean level, but maybe more 2 prosaic. But you actually have to figure out 3 something. You have to create something to show how stuff is done or to create something to communicate. 4 5 And that's what I was doing was creating something 6 to communicate to the customer, to the user of the 7 stuff, here is a command expression that will get 8 you information, and it's easy enough to understand 9 what was being done. 10 MR. NEUKOM: I think we've now been going 11 for about an hour, 15 minutes, thereabouts. Should 12 we take a short break. 13 MR. WONG: I only have one more command and we can wrap up this volume. It could be fast. 14 15 Can you do another . . . 16 MR. NEUKOM: Just from looking at 17 Mr. Lougheed, he looks to me like a man who could 18 use five minutes of sunshine. 19 MR. WONG: I'll leave it up to you, Mr. Lougheed, but in terms of these command-specific 20 21 questions, I only have one more. 22 THE WITNESS: I'd like to take a break. 2.3 MR. WONG: Okay. Sure. 24 MR. NEUKOM: Just for a little bit. 25 MR. WONG: Sure. Page 339

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1 THE VIDEOGRAPHER: Going off the record. 2 The time is 2:35 p.m. 3 (A recess was taken.) THE VIDEOGRAPHER: Back on the record. 4 5 The time is 2:51 p.m. 6 BY MR. WONG: 7 0. Mr. Lougheed, are you the author/originator of the "timers bgp" command? 8 Yes, I am. 9 Α. How do you know that you are the 10 11 originator of the "timers bgp" command? 12 Because I remember creating the command. 13 I created the original BGP support. 14 If you look at Exhibit -- well, before we Q. 15 do that, do you know approximately when you came up with the "timers bgp" command? 16 17 It would be sometime in 1989. Α. 18 Okay. If you look at Exhibit 464, Q. 19 page 42. Let me know when you're there. 20 Α. Yep. 21 You see fourth from the bottom in the 0. table, there's the "timers bgp" command shown there? 22 2.3 Α. Uh-huh. 24 And the date of earliest known document Ο. 25 for the "timers bgp" command in Exhibit 464 says Page 340